# Work Order ID 115249

*March-20-14 10:22:08 AM*

*115249*



**Item ID:** D3189-1
**Revision ID:**
**Item Name:** Chaffing Shield

**Start Date:** 3/20/14 **Start Qty:** 20.00 *20*
**Required Date:** 4/03/14 **Req'd Qty:** 20.00 *20*
**Reference:**

**Accept** *N900040100*

**Setup Start** *NS1*
**Stop** *NS2*

**Cust Item ID:**
**Customer:**

**Approvals:** **Process Plan:** MLJ **Date:** 14-03-20
**QC:** _____ **Date:** _____

**Tooling:** _____ **Date:** _____
**SPC (Y/N):** _____ **Date:** _____

**Run Start** *NR1*
**Stop** *NR2*

| Draw Nbr | Revision Nbr |
|---|---|
| D3189 | D |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 100 | SHEAR | 0.00 | | | | | | | |
| *100* | | 0.00 | | | | 25 | 0 | / | 14-3-21 |
| Waterjet | **Memo** | | | | | | | | |
| FLOW CNC Waterjet | 1-Cut as per Dwg<br>Dwg Rev: D<br>Prog Rev: D<br><br>2-Deburr if necessary | | | | | | | | |
| 103 | QC2- Inspect parts off machine FAI/FAIB | 0.00 | | | | | | | |
| *103* | | 0.00 | | | | 25 | 0 | / | 14-3-21 |
| QC | **Memo** | | | | | | | | |
| Quality Control | | | | | | | | | |

# Work Order ID 115249

*March-20-14 10:22:09 AM*

*115249*



**Item ID:** D3189-1
**Revision ID:**
**Item Name:** Chaffing Shield
**Start Date:** 3/20/14 **Start Qty:** 20.00 *20*
**Required Date:** 4/03/14 **Req'd Qty:** 20.00 *20*
**Reference:**

Accept *N900040100* Setup Start *NS1*
Stop *NS2*

**Cust Item ID:**
**Customer:**

Run Start *NR1*
Stop *NR2*

**Approvals:** **Process Plan:** _____ **Date:** _____
**QC:** _____ **Date:** _____
**Tooling:** _____ **Date:** _____
**SPC (Y/N):** _____ **Date:** _____

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 105 *105* QC Quality Control | QC8- Inspect parts - second check<br>**Memo** | 0.00 DAS 27 9-89<br>0.00 14/3/21 | | | | 25 | | | |
| 110 *110* Small Fab Small Fab | Small Fab<br>**Memo**<br>1- Roll as per Dwg D3189 | 0.00<br>0.00 | | | | 25x | | | 14/03/25 DAS 36 9-89 |
| 120 *120* QC Quality Control | QC5- Inspect part completeness to step on W/O<br>**Memo** | 0.00 DAS 27 9-89<br>0.00 14/3/26 | | | | 25 | | | |

SEE ATTACHED

# Picklist Print

*March-20-14 10:22:12 AM*



**Work Order ID:** 115249 *115249*

**Parent Item:** D3189-1 *D3189-1*

**Parent Item Name:** Chaffing Shield

**Start Date:** 3/20/14 **Required Date:** 4/03/14

**Start Qty:** 20.00 **Required Qty:** 20.00

**Comments:** IPP B05.08.22No longer made in-houseKJ/JLM
IPP Rev:C 06-03-24 Rolling Now made in House JLM
IPP Rev:D 07-04-16 As per Rev B JLM IPP Rev:E
11.05.11 now made on waterjet DD verf:JLM IPP REV:F 14.02.12
AS PER DWG REV.D DD VERF:JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M304S24GA | | Purchased | No | | | | sf | 47.3000 | | 7 | | | |
| *M304S24GA* | | | | | | | | | ** | | | | |
| 304/316 .025 Sheet | | | | | | | | | | | | | |

| Location | Loc Qty | Loc Code |
|---|---|---|
| MAT020 | 47.3 | |
| m125771 | 47.3 | |

| DART AEROSPACE LTD | Work Order: | 115249 |
|---|---|---|
| | | |
| **Description:** Chafing Shield | Part Number: | D3189-1 |
| | | |
| **Inspection Dwg:** D3189 **Rev:** E D | | Page 1 of 1 |

## FIRST ARTICLE INSPECTION CHECKLIST

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|---|---|---|---|---|---|---|
| 4.38 | +/-0.030 | 4.382 | ✓ | | ✓ JKM05 | |
| 12.00 | +/-0.030 | 12 | ✓ | | ✓ JKM07 | |
| ~~0.020~~ .025" | +/-0.010 | 0.023 | ✓ | | | |
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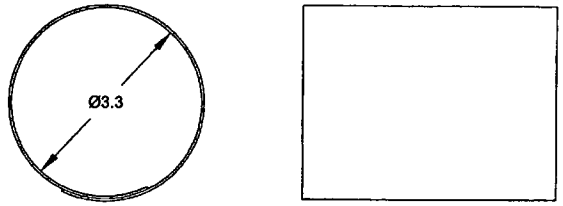
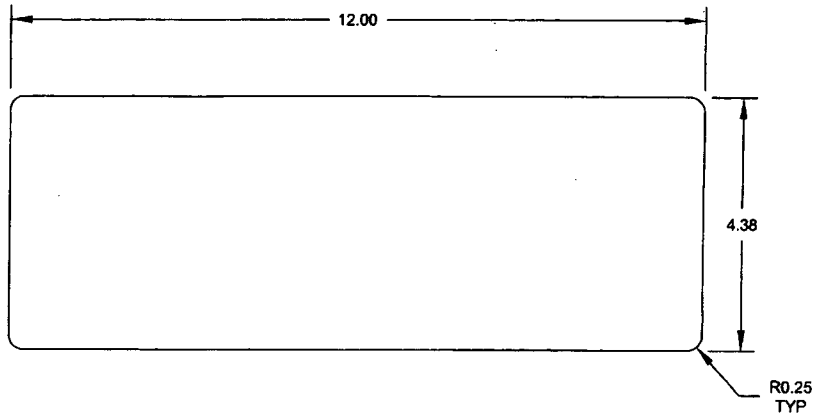
| Measured by: | | Audited by: | DAS 27 | Preliminary Approval: | |
|---|---|---|---|---|---|
| Date: | 14-3-21 | Date: | 9-89 14/3/21 | Date: | |

| Rev | Date | Change | Revised by | Approved |
|---|---|---|---|---|
| A | 11.06.21 | New Issue | KJ | |
| B | 12.09.26 | Dimensions updated per Dwg Rev C | KJ | |




**D3189-1 CHAFING SHIELD**
(ROLL D3189-1F AS SHOWN)




**D3189-1F FLAT PATTERN**

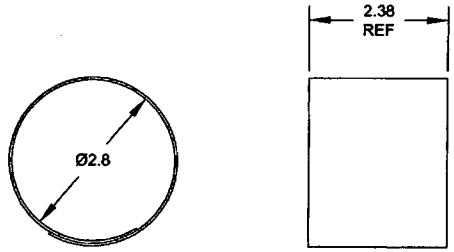
RELEASED
2014 -02- 10

NOTES:
1) MATERIAL: AISI 304/316 SS, 24 GAUGE (0.025" THICK REF) △D
PER MIL-S-5059, AMS 5513, AMS 5524, ASTM A240, OR ASME SA240
REF. DART SPEC M304S24GA
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.30 lbs

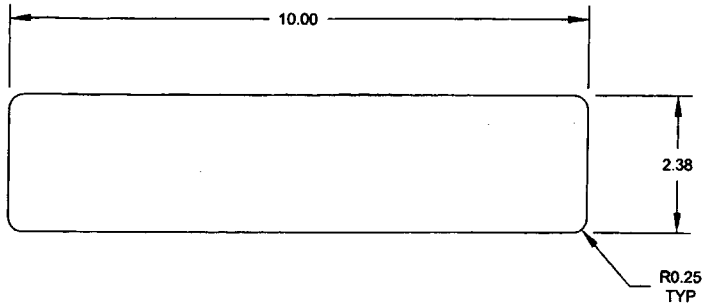
115249 MCJ
14-03-20

| REV. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| D | 24GA WAS 25GA (PAR 14-326) | CP | 14.01.07 |
| C | -1/-3 ENLARGED TO REDUCE CHANCE OF DMG TO CROSSTUBE, ALL FILLETS INCREASED TO R0.25 | CP | 12.08.14 |
| B | ADD -3 | CP | 07.01.05 |
| A | NEW ISSUE | CP | 03.05.08 |

| | | |
|---|---|---|
| DESIGN | CP | DART AEROSPACE LTD |
| DRAWN | CP | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | A.P. | DRAWING NO. D3189 REV. D |
| MFG. APPR. | | SHEET 1 OF 2 |
| APPROVED | | TITLE CHAFING SHIELD |
| DE APPR. | | SCALE NTS |
| DATE | 14.01.07 | |




**D3189-3 CHAFING SHIELD**
(ROLL D3189-3F AS SHOWN)




**D3189-3F FLAT PATTERN**

RELEASED
2014 -02- 10

NOTES:
1) MATERIAL: AISI 304/316 SS, 24 GAUGE (0.025" THICK REF) (D)
PER MIL-S-5059, AMS 5513, AMS 5524, ASTM A240, OR ASME SA240
REF. DART SPEC M304S24GA
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.13 lbs

| | | |
|---|---|---|
| DESIGN | | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |
| DRAWN | | |
| CHECKED | A.P. | DRAWING NO. REV. D |
| MFG. APPR. | | D3189 SHEET 2 OF 2 |
| APPROVED | | TITLE SCALE |
| DE APPR. | | CHAFING SHIELD NTS |
| DATE 14.01.07 | | |

NCR: Yes / No

DQA: _____ Date: _____

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: 115249

Part No. D3189-1

NCR No. _____

**DISPOSITION**

- Rework [X]
- Scrap [ ]
- Use-as-is [ ]
- Work Order Update [X]

**AGAINST DEPARTMENT/PROCESS**

| | | | | | |
|---|---|---|---|---|---|
| Skid-tube [ ] | Crosstube [ ] | Water Jet [ ] | Engineering [ ] |
| Machining [ ] | Small Fab [ ] | Prod. Eng. Coor. [ ] | Quality [ ] |
| Thermoforming [ ] | Finishing [ ] | Rec/Store/Packaging [ ] | Other [ ] |
| Large Fab [ ] | Composite [ ] | Supplier [ ] | [ ] |

| Root Cause | | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Doc/Data | [ ] | 14/3/26 | 125 | 25 | To save time, production wants to apply prosel ~~paint~~ to stacked parts, as per D412-664-243 Rev. E | DAS 12 9-89 14/3/26 | Apply thin coat of prosel 698 to concave surface. | 14-3-27 | | S 14/03/27 |
| Equip/Tooling | [ ] | | | | | | BDAS to b w/o. | 14.03.27 | | |
| Operator | [ ] | | | | | | | | | |
| Material | [ ] | | | | | | | | | |
| Setup | [ ] | | | | | | | | | |
| Other | [ ] | | | | | | | | | |
| Process | [ ] | | | | | | | | | |
| Supplier | [ ] | | | | | | | | | |
| Training | [ ] | | | | | | | | | |
| Unapproved | [ ] | | | | | | | | | |

**FAULT CATEGORY**

**Landing Gear**

- [ ] Bending
- [ ] Centre Not Concentric to O/S
- [ ] Cracks
- [ ] Crushed/Crimped
- [ ] Cuffs
- [ ] Heat Treat
- [ ] Inspection Strip in Tube
- [ ] Ripples in Bend
- [ ] Torque Waves in Extrusion
- [ ] Turning Sequence
- [ ] Wave/Twist in Tube

**General**

- [ ] Bend
- [ ] BOM/Route
- [ ] Broken/Damaged
- [ ] Burrs
- [ ] Contamination
- [ ] Countersink
- [ ] Cut Too Short
- [ ] Drill Holes
- [ ] Drawing
- [ ] Finish
- [ ] Folio
- [ ] Grain
- [ ] Hardware
- [ ] Inspection Incomplete
- [ ] Instructions Incomplete/Unclear
- [ ] Maintenance
- [ ] Mislabeled
- [ ] Misread
- [ ] Offset
- [ ] Out of Calibration
- [ ] Out of Sequence
- [ ] Outside Dimensions
- [ ] Ovalized
- [ ] Over/Under tolerance
- [ ] Part Incorrect
- [ ] Part Lost/Missing
- [ ] Part Moved
- [ ] Positioned Wrong
- [ ] Power Loss/Surge
- [ ] Pressure/Forced
- [ ] Temperature/Cure
- [ ] Weld
- [ ] Wrong Stock Pulled
- [ ] Other

_____

_____

_____